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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,487	09/05/2000	SHIGERU KAWASAKI	35.C14763	8340

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EXAMINER

SHERRILL, JASON L

ART UNIT PAPER NUMBER

2622

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/655,487

Applicant(s)

KAWASAKI ET AL.

Examiner

Jason L Sherrill

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 05 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 6-8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Takakura et al. (U.S. Patent No. 6,339,214).

For claim 1, Takakura discloses an image reading apparatus comprising: a scanning member (Fig. 3; col. 3, lines 56-62) movable along an original mounting table (61, Fig. 1; col. 5, lines 29-31) and provided with a reading element (5, Fig. 3; col. 4, line 62 - col. 5, line 2) for reading an original image; a frame member housing the scanning member (60, Fig. 1; col. 5, lines 19-32); and a control board (8, Fig. 1) adapted for controlling the scanning member and provided in the frame member (col. 5, lines 66 - col. 6, line 9); wherein the control board is so positioned that, when the scanning member moves toward the control board, a portion protruding under the scanning member does not pass on the control board (Fig. 1).

For claim 2, Takakura discloses an image reading apparatus further comprising: a guide member for guiding the movement of the scanning member (75, Fig. 1; col. 5, lines 19-25);

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wherein the control board is positioned opposite to the protruding portion of the scanning member with respect to the guide member (Fig. 1).

For claim 6, Takakura discloses an image reading apparatus comprising: a scanning member (Fig. 3; col. 3, lines 56-62) movable along an original mounting table (61, Fig. 1; col. 5, lines 29-31) and provided with a reading element (5, Fig. 3; col. 4, line 62 - col. 5, line 2) for reading an original image; drive means for driving the scanning member (M, Fig. 1; col. 5, lines 57-65); a frame member housing the scanning member (60, Fig. 1; col. 5, lines 19-32); a guide member for guiding the movement of the scanning member, the guide member being attached to the frame member (75, Fig. 1; col. 5, lines 19-25); a control board (8, Fig. 1) adapted for controlling the scanning member and provided in the frame member (col. 5, lines 66 - col. 6, line 9); wherein the control board is positioned opposite to the drive means with respect to the guide member (Fig. 1).

For claim 7, Takakura discloses an image reading apparatus comprising: a scanning member (Fig. 3; col. 3, lines 56-62) movable along an original mounting table (61, Fig. 1; col. 5, lines 29-31) and provided with a reading element (5, Fig. 3; col. 4, line 62 - col. 5, line 2) for reading an original image; a frame member housing the scanning member (60, Fig. 1; col. 5, lines 19-32); a control board (8, Fig. 1) adapted for controlling the scanning member and provided in the frame member (col. 5, lines 66 - col. 6, line 9); an interface connector mounted on a side of the control board (80, Fig. 1; col. 6, lines 3-6); wherein the control board is fixed to the frame member at least at one of the sides on which the interface connector is not mounted (8, Fig. 1; col. 6, lines 6-9).

For claim 8, Takakura discloses an image reading apparatus further comprising a conductive board cover for covering the control board (76, Fig. 1; col. 6, lines 6-9).

For claim 11, Takakura discloses an image reading apparatus comprising: a scanning member (Fig. 3; col. 3, lines 56-62) movable along an original mounting table (61, Fig. 1; col. 5, lines 29-31) and provided with a reading element (5, Fig. 3; col. 4, line 62 - col. 5, line 2) for reading an original image; a frame member housing the scanning member (60, Fig. 1; col. 5, lines 19-32); a guide member for guiding the movement of the scanning member, the guide member being attached to the frame member (75 & 76, Fig. 1; col. 5, lines 19-25); wherein the guide member is provided in a position where the total sum of moments working on the scanning member becomes substantially zero (col. 5, lines 33-52).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takakura et al. (U.S. Patent No. 6,339,214).

For claim 10, Takakura discloses an image reading apparatus wherein the control board is fixed to the frame member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fix the control board to the frame by using a screw.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takakura et al. (U.S. Patent No. 6,339,214) as applied to claim 1 above, and further in view of Chiang (U.S. Patent No. 6,330,084).

For claims 3, 4, and 5, Takakura fails to teach an image reading apparatus wherein the scanning member includes drive means for moving the scanning member, the drive means protrudes in the under side of the scanning member, the drive means includes a drive source and a drive transmission member, and the drive transmission member is a gear.

Chiang discloses an image reading apparatus wherein the scanning member includes drive means for moving the scanning member (66, Fig. 6; col. 3, lines 4-14), the drive means protrudes in the under side of the scanning member (66, Fig. 6 & 7; col. 3, lines 5-46), the drive means includes a drive source (76, Fig. 6) and a drive transmission member (70, 72, 74, Fig. 6; col. 3, lines 6-17), and the drive transmission member is a gear (70, Fig. 6; col. 3, lines 6-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the scanner of Takakura and the scanner of Chiang because both teach scanning devices wherein a portion protruding under the scanning member does not pass on the control board. The improvement on Takakura by Chiang would allow for a smoother and more reliable drive system for the scanning member.

*Allowable Subject Matter*

6. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Mai (U.S. Patent No. 6,002,508) discloses an optical scanner with a control circuit board removed out of the casing.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L Sherrill whose telephone number is 703-306-4053. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 703-305-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5397 for regular communications and 703-306-5397 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

  
EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

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JLS

June 29, 2003